

Remarks

In the present response, claims 1-16 and 20-23 are presented for examination.

I. Double Patenting

Claims 1, 3, 4, 11, 13, 15, and 16 are rejected on the ground of non-statutory obviousness-type double patenting over USPN 6,647,514. This rejection is moot since Applicants submit a terminal disclaimer.

II. Claim Rejections: 35 USC § 102(e)

Claims 1-3, 7-9, 17, 18, and 20 are rejected under 35 USC § 102(e) as being anticipated by USPN 6,799,283 (Tamai). Applicants respectfully traverse this rejection.

A proper rejection of a claim under 35 U.S.C. § 102 requires that a single prior art reference disclose each element of the claim. See MPEP § 2131, also, *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983). Since Tamai neither teaches nor suggests each element in the claims, these claims are allowable over Tamai.

Claims 1 and 11 recite numerous limitations that are not taught or suggested in Tamai. By way of example, each claim recites (emphasis added):

altering placement of input/output (I/O) requests in a queue in response to identifying that the storage array is close to permanently losing data, wherein **placement** in the queue of I/O requests for rebuilding at least a portion of the storage array is **altered in order to increase priority** with respect to host I/O requests.

Tamai is directed to a disk array device that reads data from a disk array to transmit the data to a host device and writes data from the host device in the disk array in a short period of time. Nowhere does Tamai teach or even suggest altering placement of I/O requests in a queue in response to identifying that the storage array is close to

permanently losing data. Further, Tamai does not disclose that placement of rebuilding I/O requests is altered in order to increase priority with respect to host I/O requests.

For at least these reasons, independent claims 1 and 11 and their dependent claims are allowable over the art of record.

III. Claim Rejections: 35 USC § 102(b)

Claims 15, 16, 20, and 23 are rejected under 35 USC § 102(b) as being anticipated by USPN 5,680,539 (Jones). Applicants respectfully traverse this rejection.

A proper rejection of a claim under 35 U.S.C. §102 requires that a single prior art reference disclose each element of the claim. See MPEP § 2131, also, *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983). Since Jones neither teaches nor suggests each element in the claims, these claims are allowable over Jones.

Claim 15 recites numerous limitations that are not taught or suggested in Jones. By way of example, claim 15 recites that “host I/O requests are placed into the request queue structure below existing host I/O requests but above existing rebuild I/O requests when host I/O requests are to have priority.” In other words, host I/O requests are placed above rebuild I/O requests in the queue. This structure enables host I/O requests to have priority over rebuild I/O requests.

In contrast to claim 15, Jones teaches a different method. In Jones, the host I/O requests and rebuild I/O requests are allocated certain queue depths in the queue. These queue depths can be increased or decreased in order to maintain a predictable level of performance degradation. Jones never discloses that host I/O requests are placed above rebuild I/O requests in the queue in order to alter the level of performance degradation. Jones changes the depth allocated to host and rebuild requests. Jones never teaches changing priority by placing host requests above rebuild requests in the queue.

For at least these reasons, independent claim 15 and its dependent claims are allowable over Jones.

CONCLUSION

In view of the above, Applicants believe that all pending claims are in condition for allowance. Allowance of these claims is respectfully requested.

Any inquiry regarding this Amendment and Response should be directed to Philip S. Lyren at Telephone No. 832-236-5529. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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